

ABSTRACT OF THE DISCLOSURE

The invention concerns a technology for detecting a  
5 frame synchronous pattern comprising:

a data switch section for performing a data  
rearrangement processing of parallel data having a  
given frame synchronous pattern;

a temporary region detection section for  
10 temporarily detecting a candidate of region data  
containing the frame synchronous pattern from the  
parallel data;

a frame synchronous pattern detection section  
for detecting the frame synchronous pattern from the  
15 temporary region data of the temporary region  
detection section; and

a data switch control section for controlling  
data rearrangement processing by the data switch  
section according to the detection state of the  
20 temporary region data by the temporary region  
detection section and to the detection state of the  
frame synchronous pattern by the frame synchronous  
pattern detection section, in order to detect  
precisely the frame synchronous pattern in  $m$  parallel  
25 data without enabling the detection of  $m$  ways of frame  
synchronous patterns in  $m$  parallel data.